

REMARKS

Claims 1 through 17 stand rejected. Claim 2, 3 and 10 through 17 have been cancelled. Claim 18 has been added. Claim 1 is the only independent claim remaining in the patent application.

Claim 18 has been added to the patent application. Claim 18 does not include new matter. Claim 18 sets forth a physical characteristic of the distal ends of the electrical spring connection assembly as being bent inwardly to engage the conducting case 18. None of the references cited by the Applicant nor the Examiner disclose this feature.

Claims 1 through 17 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, claim 1 includes the language "the retention force being greater than the engagement force," (line 11). The Examiner states that the language is unclear because Applicant has not provided any specifics about the amount of force. Applicant respectfully traverses this rejection.

The specification sets forth the existence of a retention force 51 and an engagement force 45. Figure 3 shows two forces, graphically represented by arrows 45 and 51 wherein the arrow 51 is larger in size than the arrow 45, representing the retention force being greater than the engagement force. Therefore, the relationship as to the sizes of the forces is well documented and disclosed in the above-captioned patent application. The Examiner suggests that amounts for the forces must be identified in the specification. Applicant respectfully disagrees with this assertion. Unless these amounts are required to overcome a known amount in the prior art, specific amounts are not required. Applicant would like to further clarify the position taken when setting forth claim 1 in that the size of the force is not important in the claimed invention, but the fact that the retention force generated by the electrical spring connection assembly 10 being greater than the engagement force is important and the subject matter of this claimed invention.

In addition, Applicant suggests that such figures are not necessary, much like most dimensions are not necessary. Similar to physical dimensions, the amounts of forces are not necessary when claiming an invention. If dimensions of forces and physical structures were required, every figure in 95% of the patent applications filed would not disclose enough information because there are no dimensions in any of the figures. More specifically, dimensions are not important in claiming an invention, whereas relationships between elements are. Therefore, Applicant believes claim 1, and all claims depending therefrom, overcome the rejection under 35 U.S.C §112, second paragraph, because the requirement for specifying force amounts is not founded in the regulations and case law governing claim formation.

Claim 1 has been rejected under 35 U.S.C §102(b) as being anticipated by United States Patent 6,358,071. Applicant, being the inventor of this patent and the above-captioned patent application, respectfully traverses this rejection.

United States Patent 6,358,071 (the '071 reference) discloses an electrical spring connector assembly having leaf springs 16, a base 17, wherein the leaf springs include a beam spring extending out from the leaf spring portion.

Claim 1, as amended to clarify the invention, claims an electrical spring connection assembly 10 having a base 36, a leaf spring portion 40 and a beam spring portion 46. The leaf spring portion 40 defines a bend diameter 44 that is smaller than the predetermined case diameter 22 of the conducting case 18. The beam spring portion 46 defines a beam diameter that is greater than the predetermined case diameter 22 of the conducting case 18.

Although the '071 reference discloses an electrical spring connection assembly, it does not disclose the ability for the spring assembly to have a retention force that is greater than the engagement force. While the Examiner states that such is the case, there is no disclosure in the '071 reference which would indicate such to be the case. In contradistinction, claim 1 sets forth elements which specifically provide for the ability to create a retention force that is greater than the engagement force. In particular, the bend diameter 44 is smaller than the predetermined case diameter which provides for unencumbered flexing of the bend diameter 44 when a spark plug is being inserted therein and includes a beam spring portion 46 having a beam diameter that is greater than the

predetermined case diameter 22 of the conducting case 18 which requires the beam spring portion 46 to flex without having the ability of the distal end from moving out past the predetermined terminal diameter 22. These elements clearly provide for the ability to have the electrical spring connection assembly 10 that has a retention force greater than the engagement force. Therefore, claim 1 and all claims depending therefrom, overcome the rejection under 35 U.S.C. §102(b) and are in condition for allowance.

Claims 2 through 6 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the '071 reference. The Examiner makes judicial notice of the fact that it would have been obvious for one skilled in the art to modify the leaf spring portion to make the bend diameter smaller than the predetermined case diameter. Applicant strongly disagrees with such a leap of faith made by the Examiner. The Examiner is forbidden from using hindsight to determine what would be obvious and what would not. There is no indication in the '071 reference that would suggest or teach the reduction of the bend diameter to create a relationship between a force which is used to insert a sparkplug into the electrical spring connection assembly and the force used to remove the sparkplug from the electrical spring connection assembly. There simply is no disclosure in the '071 reference that would indicate such would be the case. In addition, this is not a mere testing situation to identify an optimum value as the Examiner would suggest. This is a breakthrough in the technology to manipulate the relationship between the engagement and retention forces. Therefore, Applicant respectfully traverses the rejection under 35 U.S.C. §103(a) and all remaining claims overcome this rejection.

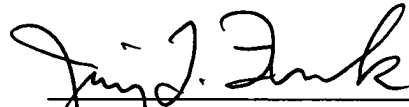
The specification has been amended to clarify the disclosure by more accurately identifying the elements in the Brief Description of the Drawings. In addition, to more accurately reflect what element 22 is, it has been renamed from "predetermined terminal diameter" to "predetermined case diameter." It is believed by Applicant that this new name will more accurately describe the invention as disclosed. In addition, this is not a new name because it was used in the Summary of the Invention (paragraph 0005). No new matter was added from these corrections and, as such, further place the patent application in condition for allowance.

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It is respectfully submitted that this patent application is in condition for allowance, which allowance is respectfully solicited. If the Examiner has any questions regarding this amendment or patent application, the Examiner is invited to contact the undersigned.

The Commissioner is hereby authorized to charge any additional fee associated with this Communication to Deposit Account No. 50-0831.

Respectfully submitted,



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